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CONNSTEP, Inc. – Connecticut's Manufacturing Resource Center CONNSTEP, Inc. is sponsored by the Connecticut Department of Economic and Community Development and is a NIST MEP Network Affiliate. Contact: Gerard W. Ward, 1090 Elm Street, Suite 202, Rocky Hill, CT 06067, (860) 529-5120, Fax: (860) 529-5001, Email: gward@connstep.org, Website: <http://www.connstep.org/>

THE MANUFACTURING EXTENSION PARTNERSHIP IN CONNECTICUT

Manufacturing Extension Partnership (MEP) is a nationwide system of services and support for smaller manufacturers to become more globally competitive. At the heart of the system is a network of affiliated, locally-based manufacturing extension centers. Each center, like CONNSTEP, is a partnership, typically involving federal, state, and local governments; industry; educational institutions; and other sources of expertise, information and funding support.

COMPANY CLIPS

Peck Spring uses Lean Manufacturing Practices to Gain the Competitive Edge

The Peck Spring Company, a division of NW Industries, custom manufactures springs and flat metal products. It is a division of MW Industries, a nation-wide group of seven spring and fastener manufacturers. Founded in 1917, the company now employs almost 100 people at its Plainville, Connecticut facility.

In an increasingly competitive market, Peck Spring knew they needed to lower costs, increase throughput, and improve customer satisfaction to gain an advantage. In November 2000, the company called in the Connecticut State Technology Extension Program, Inc. (CONNSTEP) to help it achieve these goals. CONNSTEP conducted a baseline lean and financial assessment and helped the company identify the product lines upon which to focus its efforts. CONNSTEP also connected Peck Spring with Northeast Utilities' Process Reengineering for Increased Manufacturing Efficiency (PRIME) Audit program and obtained financial assistance for the implementation of lean.

CONNSTEP conducted lean awareness training to a selected team at Peck Spring and provided ongoing training throughout the process. CONNSTEP helped the team characterize and document the company's existing processes. Production measurements such as throughput times, cycle times, inventory, and scrap were addressed for improvements. The team evaluated the product handling process from point of origin to the delivery of goods to the customer. CONNSTEP also helped the company document material flow and sequence of operations as well as the existing process layout for the identified products. CONNSTEP created a detailed plant layout in a CAD drawing, with verified room dimensions and equipment measurements, which helped Peck Spring to analyze its flow of materials and decide where to move its new equipment. The project greatly improved productivity, reduced inventory levels, and significantly reduced delivery lead-times. Lean

Continued

STATE STATS

DATA* COVERS JANUARY TO DECEMBER 2001

Number of projects completed with firms

357

Number of firms served

333

Number of firms served for the first time

93

Federal cost share for current operating year

\$1,027,500

State/other cost share for current operating year

\$2,055,000

**Data as reported from center*

DATA** COVERS JANUARY TO DECEMBER 2001

Increased sales & retained sales

\$19,615,500

Client capital investment

\$4,858,510

Total cost savings

\$5,401,001

Jobs (created & retained)

111

***Source: Independent client impact survey*



practices greatly reduced the distance traveled by the product during the manufacturing process, resulting in an 80 percent reduction in processing time which allowed the company to produce five times more product in the same amount of time.

Foster Increases Productivity With Lean Manufacturing

Foster Corporation is a rapidly growing producer of custom and specialty thermoplastic compounds for the medical, wire and cable, and electrical/electronics products industries. Founded in 1990, the company is located in Dayville, employs 38 people, and is currently looking forward to a plant expansion, which will include a clean room for pharmaceutical grade compounding. Foster also maintains a facility in North Las Vegas, Nevada, which employs approximately 12 people. Foster realized that in order to grow the business, the company had to improve its turnaround time. Owner Lawrence Acquarulo first heard about the benefits of lean manufacturing at a Northeast Utilities (NU) presentation. Shortly after learning the value of lean, the Connecticut State Technology Extension Program (CONNSTEP) contacted him to discuss its lean manufacturing services. CONNSTEP offered funding help and a program to reduce turnaround time that fit perfectly with Foster's goals and objectives.

CONNSTEP began providing Connecticut Department of Labor-sponsored lean awareness and value stream mapping training to the Foster workforce. CONNSTEP organized and facilitated a continuous improvement team comprised of representatives from all Foster's departments. The team conducted a value stream mapping exercise on the entire production process, beginning with order entry and acquisition of materials through the extrusion process and shipping. The exercise revealed that, due to the varied lot sizes the company produces, a number of changeovers are performed during the week. To improve lead times, Foster had to reduce setup times while maintaining a high standard of quality.

CONNSTEP designed a reduction project to address the delays causing the lengthy changeover time from extruding one material to the next. On CONNSTEP's recommendation, Foster purchased new extruder components, which minimize the cool down period during batch-to-batch changeovers. CONNSTEP worked with the company to develop standard work practices and trained the workers in the new procedures, thereby increasing throughput by \$300,000 per year. Quality issues identified during the setup reduction study were addressed, and CONNSTEP developed solutions expected to save over \$60,000 and 17,000-kilowatt hours per year. At the conclusion of the project, Foster reduced its setup times by 40 percent and increased productivity by over 15 percent, making it more competitive in the industry.